

Set	Items	Description
S1	2702	CURVE() CRYPTOGRAPH? OR ELLIPTIC OR HYPERELLIPTIC
S2	5821	JACOBI?
S3	7	STICKELBERGER OR STICKERBERGER
S4	0	S1 AND S2 AND S3
S5	38	S1 AND S2
S6	1186	CURVE(N) CRYPTOGRAPH?
S7	2704	S1 OR S6
S8	0	S7 AND S3
S9	38	S7 AND S2
S10	16	S9 NOT PY>1999
S11	16	S10 NOT PD>19990827
S12	15	RD (unique items)

File 15:ABI/Inform(R) 1971-2004/Apr 13
(c) 2004 ProQuest Info&Learning

File 810:Business Wire 1986-1999/Feb 28
(c) 1999 Business Wire

File 647:CMP Computer Fulltext 1988-2004/Apr W1
(c) 2004 CMP Media, LLC

File 275:Gale Group Computer DB(TM) 1983-2004/Apr 15
(c) 2004 The Gale Group

File 674:Computer News Fulltext 1989-2004/Apr W1
(c) 2004 IDG Communications

File 696:DIALOG Telecom. Newsletters 1995-2004/Apr 14
(c) 2004 The Dialog Corp.

File 624:McGraw-Hill Publications 1985-2004/Apr 14
(c) 2004 McGraw-Hill Co. Inc

File 636:Gale Group Newsletter DB(TM) 1987-2004/Apr 15
(c) 2004 The Gale Group

File 484:Periodical Abs Plustext 1986-2004/Apr W2
(c) 2004 ProQuest

File 813:PR Newswire 1987-1999/Apr 30
(c) 1999 PR Newswire Association Inc

File 613:PR Newswire 1999-2004/Apr 15
(c) 2004 PR Newswire Association Inc

File 16:Gale Group PROMT(R) 1990-2004/Apr 15
(c) 2004 The Gale Group

File 160:Gale Group PROMT(R) 1972-1989
(c) 1999 The Gale Group

File 141:Readers Guide 1983-2004/Apr
(c) 2004 The HW Wilson Co

File 370:Science 1996-1999/Jul W3
(c) 1999 AAAS

File 553:Wilson Bus. Abs. FullText 1982-2004/Apr
(c) 2004 The HW Wilson Co

12/3,K/1 (Item 1 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)
(c) 2004 ProQuest Info&Learning. All rts. reserv.

02567117 209233181

Preconditioned CG-like methods for solving non-linear convection-diffusion equations

G H Juncu; I Iliuta

International Journal of Numerical Methods for Heat & Fluid Flow v5n3

PP: 239-250 Mar 1995

ISSN: 0961-5539 JRNL CODE: NMHF

WORD COUNT: 2957

...TEXT: and conjugate residual methods have been proposed for solving non-symmetric linear systems. For non-self-adjoint **elliptic** problems with variable coefficients, where the character of the problem may vary depending on the position in...

... which ceases to be an M-matrix when convection dominates diffusion. The system matrix, i.e. the **Jacobian** matrix structure depends on the non-linearity type. Special attention is dedicated to the influence of the ...18, 142-156 (1978)

3 Kuo, C.-C. J., Chan, T. F. and Tong, C. Multilevel filtering **elliptic** preconditioners, SIAM J. Matrix Anal. Appl., 11, 403-429 (1990)

4 Elman, H. C. Relaxed and stabilized...

...5 Elman, H. C. and Schultz, M. H. Preconditioning by fast direct methods for nonsell-adjoint nonseparable **elliptic** equations, SIAM J. Num. Anal., 23, 44-56 (1986)

6 Adam, D. Mesh independence for Galerkin approach...

12/3,K/2 (Item 2 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)
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02313051 86920240

Multilevel solution of augmented drift-diffusion equations

M.B. Davis; G.F. Carey

Compel v15n2 PP: 4-18 1996

ISSN: 0332-1649 JRNL CODE: COPL

WORD COUNT: 4881

...TEXT: been shown to be an efficient method of solution for linear systems arising from the discretization of **elliptic** boundary-value problems[12, 13, 14, 15]. Discretization of the electrostatic potential equation and the electron and...methods

Multigrid methods were first developed to solve large, sparse linear systems arising from the discretization of **elliptic** problems[12]. These schemes have proven to be very efficient in the solution of such systems, especially...

...not been previously studied.

The essential idea behind multigrid schemes is that certain iterative methods such as **Jacobi** or Gauss-Seidel point iteration do very well in damping high frequency components of the error near...accuracy for the same number of grid points. The L^2 finite element error estimate for **elliptic** PDEs of the form considered here [1] is

where r is the regularity of the solution and...

12/3,K/3 (Item 3 from file: 15)

DIALOG(R)File 15:ABI/Inform(R)
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02240464 84988461

Three-dimensional finite element simulation of connecting rod forging using a new remeshing scheme

Cho, J R; Yang, D Y

Engineering Computations v15n6 PP: 777-803 1998

ISSN: 0264-4401 JRNL CODE: NGCP

WORD COUNT: 5358

...TEXT: interference with the die. Moreover, further computation might be impossible without remeshing if the determinant of the **Jacobian** transformation matrix is negative. In general, such interference and mesh degeneracy occur at the contact region of...

... generation of the mesh by the body-fitted mapping technique can be accomplished by solving numerically the **elliptic** partial differential equation with Dirichlet condition[19, 20, 21]. It is important that the coordinate system and...

...u,v,w) for which u,v and w are the solutions of the following system of **elliptic** partial differential equations:

(27)

where ∇^2 denotes the Laplacian operator. The grid coordinates of each hexahedron... is calculated by mapping an element in transformed space against the actual element. The determinant of the **Jacobian** relates the transformed space to the physical space as

(31)

where $|J|$ is the determinant of **Jacobian**, $dx dy dz$ and $d[xi]d[eta]d[zeta]$ are values of infinitesimal volumes for a physical element...20. Mastin, C.W. and Thompson, J.F., "Transformation of three-dimensional regions onto rectangular regions by **elliptic** systems", Number. Math., Vol. 29, 1978, pp. 397-407.

21. Miki, K. and Takagi, T., "A domain...

12/3,K/4 (Item 1 from file: 647)

DIALOG(R)File 647:CMP Computer Fulltext

(c) 2004 CMP Media, LLC. All rts. reserv.

00647114 CMP ACCESSION NUMBER: CRN19890227S3997

The Mass Market's Revenge

COMPUTER RESELLER NEWS, 1989, n 303, 77

PUBLICATION DATE: 890227

JOURNAL CODE: CRN LANGUAGE: English

RECORD TYPE: Fulltext

SECTION HEADING: 303PG77A

WORD COUNT: 220

... software was developed for the serious calculator-in-shirt-pocket set. While it offered packages such as **Jacobian Elliptic** Functions, Einstein Distortions and Spherical Triangles, HP did not offer word-processing, accounting or portfolio-management software...

12/3,K/5 (Item 1 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)

(c) 2004 The Gale Group. All rts. reserv.

01557066 SUPPLIER NUMBER: 14516638 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Highly efficient second harmonic generation.

Beausoleil, Raymond G.

Sept 30, 1992

ISSN: 0892-9947

LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 3633

LINE COUNT: 00304

... Mathematical Expression Omitted]
then the SHG conversion efficiency is given by
where $sn(u, [\text{micro}])$ is the **Jacobian elliptic** sine function. While this special function is unfamiliar to many of us, it is described in detail... At higher nonlinear drives, the efficiency actually decreases. (In fact, due to the periodic nature of the **Jacobian elliptic** sine function, the conversion efficiency will continue to rise and fall as the drive is increased.) In... maximum efficiency obtained in the previous step. The function $K(z)$ in Figure 4 is the Complete **Elliptic** Integral of the First Kind, which can be evaluated numerically using prepackaged subroutines, (5) but the approximation...

12/3,K/6 (Item 2 from file: 275)

DIALOG(R) File 275:Gale Group Computer DB(TM)

(c) 2004 The Gale Group. All rts. reserv.

01295247 SUPPLIER NUMBER: 07589645 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Intelligence in scientific computing.

Abelson, Harold; Eisenberg, Michael; Halfant, Matthew; Katzenelson, Jacob; Sacks, Elisha; Sussman, Gerald J.; Wisdom, Jack; Yip, Kenneth

Communications of the ACM, v32, n5, p546(17)

May, 1989

ISSN: 0001-0782

LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 8052

LINE COUNT: 00664

... is KAM's description of the picture it generates for Hennon's map:
The portrait has an **elliptic** fixed point at (0, 0). Surrounding the fixed point is a regular region bounded by a KAM... equations and compiles an iterative scheme for approximating these variables. This requires symbolic differentiation to produce a **Jacobian** that is incorporated into a Newton-Raphson search and to augment the system state so that it...

12/3,K/7 (Item 3 from file: 275)

DIALOG(R) File 275:Gale Group Computer DB(TM)

(c) 2004 The Gale Group. All rts. reserv.

01214070 SUPPLIER NUMBER: 07287627

Parametrizing and graphing nonsingular cubic curves. (technical)

Patterson, R.R.

Computer-Aided Design, v20, n10, p615(9)

Dec, 1988

DOCUMENT TYPE: technical

ISSN: 0010-4485

LANGUAGE: ENGLISH

RECORD TYPE: ABSTRACT

ABSTRACT: **Elliptic** functions are used to parametrize and graph nonsingular cubic curves. First, a sequence of transformations is derived that reduces a third degree equation to a standard equation. A parametrization in terms of **elliptic** functions is given for the graph of the standard equation. The transformations convert this parametrization to a...

CAPTIONS: Period parallelograms of **Jacobi elliptic** functions. (chart); Various equation types. (graph)

12/3,K/8 (Item 4 from file: 275)

DIALOG(R) File 275:Gale Group Computer DB(TM)

(c) 2004 The Gale Group. All rts. reserv.

01183986 SUPPLIER NUMBER: 06556331

Software considerations for the "Black Box" solver FIDISOL for partial

***differential equations.**

Schonauer, Willi; Schnepf, Eric

ACM Transactions on Mathematical Software, v13, n4, p333(17)

Dec, 1987

ISSN: 0098-3500

LANGUAGE: ENGLISH

RECORD TYPE: ABSTRACT

...ABSTRACT: the solution of partial differential equations (PDE's). It solves nonlinear systems of two-and three-dimensional **elliptic** and parabolic PDE's with nonlinear boundary conditions on the boundaries of a rectangular domain. Fidisol is...

CAPTIONS: Program listing-program frame for the PDE's (program); Program listing-program frame for the **Jacobian** matrices for the BDs. (program); Program listing-ca11 and parameter list of Fidisol for three-dimensional. (program)

12/3,K/9 (Item 1 from file: 484)

DIALOG(R)File 484:Periodical Abs Plustext

(c) 2004 ProQuest. All rts. reserv.

04203949 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Mathematics of the 19th Century: Geometry/Analytic Function Theory

Ewing, John

College Mathematics Journal (PCMJ), v30 n2, p159-161, p.3

Mar 1999

ISSN: 0746-8342 JOURNAL CODE: PCMJ

DOCUMENT TYPE: Book Review-Favorable

LANGUAGE: English

RECORD TYPE: Fulltext; Abstract

WORD COUNT: 1597

TEXT:

... future. The work of Gauss on geometry serves as one example. That work was taken up by **Jacobi** and Minding during the next fifty years, not with applications in mind but because the mathematics was...

...in the work of Cauchy, Dirichet, and Weierstrass? Who could have known that the fussy calculations of **Jacobi**, Eisenstein, and **Jacobi** on **elliptic** curves and analytic functions would lead first to a proof of the Prime Number Theorem at the...

12/3,K/10 (Item 2 from file: 484)

DIALOG(R)File 484:Periodical Abs Plustext

(c) 2004 ProQuest. All rts. reserv.

04078191 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Exact solution of Fermat's equation (a definitive resolution of Fermat's last theorem)

Escultura, E E

Nonlinear Studies (NON), v5 n2, p227-254, p.28

1998

ISSN: 1359-8678 JOURNAL CODE: NON

DOCUMENT TYPE: Feature

LANGUAGE: English

RECORD TYPE: Fulltext; Abstract

WORD COUNT: 5778

TEXT:

... 41] the space of surfaces is enlarged to insure existence. This is achieved by allowing set-valued **jacobian** of a vector partial differential equation satisfying the requirements in [41] with unit measure or probability distribution. A generalized **Jacobian** is the expectation of a set-valued **jacobian** with probability distribution. Thus, the local solution of a given partial differential equation with set-valued **Jacobian** depends on its probability distribution; consequently, the solution space forms a family of surfaces each of which...

...a generalized surface. A conventional surface is a solution of conventional partial differential equation (with well-defined **Jacobian**)

satisfying the requirements in [41]. Probability distribution introduces uncertainty in the space of generalized surfaces. Another level...then find the partial derivatives of z with respect to u and v , respectively, and form the **Jacobian** at any point corresponding to given values of u and v . Since Equation (1) consists of polynomial...

...c) in S , we can take, say, a parametric curve in it containing this point and the **Jacobian** there as initial and boundary conditions. They would be necessary conditions satisfied by Equation (1) as solution...1946) Fermat's Last Theorem, Amer. Math. Monthly 53, 555-578. (33) Wiles, A. (1995) Modular **elliptic** curves and Fermat's Last Theorem, Annals of Mathematics 141(3), 443-551.
Wiles, A. and...

12/3,K/11 (Item 3 from file: 484)
DIALOG(R)File 484:Periodical Abs Plustext
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03486519

Parametrizations of elliptic curves by Shimura curves and by classical modular curves

Ribet, Kenneth A; Takahashi, Shuzo
Proceedings of the National Academy of Sciences of the United States of America (IPNA), v94 n21, p11110-11114, p.5

Oct 14, 1997

ISSN: 0027-8424 JOURNAL CODE: IPNA

DOCUMENT TYPE: Feature

LANGUAGE: English RECORD TYPE: Abstract

Parametrizations of elliptic curves by Shimura curves and by classical modular curves

...ABSTRACT: Takahashi examine relations between δ and analogues of δ in which $J_0(N)$ is replaced by the **Jacobian** of a Shimura curve.

12/3,K/12 (Item 4 from file: 484)
DIALOG(R)File 484:Periodical Abs Plustext
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03107241

New infinite families of exact sums of squares formulas, Jacobi elliptic functions, and Ramanujan's tau function

Milne, Stephen C

Proceedings of the National Academy of Sciences of the United States of America (IPNA), v93 n26, p15004-15008, p.5

Dec 24, 1996

ISSN: 0027-8424 JOURNAL CODE: IPNA

DOCUMENT TYPE: Feature

LANGUAGE: English RECORD TYPE: Abstract

New infinite families of exact sums of squares formulas, Jacobi elliptic functions, and Ramanujan's tau function

ABSTRACT: Researchers give two infinite families of explicit exact formulas that generalize **Jacobi**'s (1829) four and eight squares identities to $4n$ to the second power or $4n(n$ plus...

12/3,K/13 (Item 5 from file: 484)
DIALOG(R)File 484:Periodical Abs Plustext
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02767862 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Leibniz and Clarke on miracles

Vailati, Ezio

Journal of the History of Philosophy (PJHP), v33 n4, p563-591

Oct 1995

ISSN: 0022-5053

JOURNAL CODE: PJHP

DOCUMENT TYPE: Feature

LANGUAGE: English

RECORD TYPE: Fulltext; Abstract

WORD COUNT: 15088

LENGTH: Long (31+ col inches)

TEXT:

... one. That is, in relation to the whole cosmos it may be better that Jupiter follows an **elliptic** trajectory, but there is nothing in Jupiter itself which justifies or grounds it. In this respect, Leibniz...VI. 56 Notes, pp. 81-83 of the 1702 edition; in Hoskin, "Mining All Within," 359. 57 **Jacobi** Rohaulti Physica; latine vertit, recensuit et uberioribus iam Annotationibus, ex illustrissimi Isaaci Newtoni Phosophia maximam partem haustis...

12/3,K/14 (Item 6 from file: 484)

DIALOG(R)File 484:Periodical Abs Plustext

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01388968

Charged particle trajectories in simple nonuniform magnetic fields

Repko, Jane M; Repko, Wayne W; Saaf, Allan

American Journal of Physics (IAJP), v59 n7, p652-655

Jul 1991

ISSN: 0002-9505

JOURNAL CODE: IAJP

DOCUMENT TYPE: Feature

LANGUAGE: English

RECORD TYPE: Abstract

LENGTH: Long (31+ col inches)

...ABSTRACT: plane of the motion is presented. The parametric equations for the trajectory are expressible in terms of **Jacobi elliptic** functions.

12/3,K/15 (Item 1 from file: 160)

DIALOG(R)File 160:Gale Group PROMT(R)

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02259260

PC-MATLAB v3.5 Supports PC/AT Protected Mode, Adds New Functions

News Release May, 1989 p. 1

...solution of ordinary differential equations and systems of nonlinear equations, numerical function integration, unconstrained nonlinear optimization, complete **elliptic** integral of the first kind, **Jacobi elliptic** functions, and other numeric techniques.

...